

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/721,959
Attorney Docket No. Q61990

REMARKS

I. Introduction

Pending claims 1-6 have been examined. Claims 5 and 6 are allowed and claims 1-4 are rejected. Specifically:

- claim 1 is rejected under 35 U.S.C. § 102(b) as allegedly being anticipated U.S. Patent No. 5,822,313 to Malek et al. (hereinafter “Malek”);
- claim 3 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Malek; and
- claims 2 and 4 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Malek in view of U.S. Patent No. 5,790,535 to Kou (hereinafter “Kou”).

Applicant traverses the rejections of claims 1-4 as set forth in parts III and IV below.

II. Allowable Subject Matter

As noted above, claims 5 and 6 are allowed. In the Office Action, the Examiner implies that the claims are allowable because they contain certain features. While the Examiner does indeed reference certain patentable features of the claimed invention, Applicant respectfully submits that these features should be considered exemplary and non-limiting. Indeed, each of the allowed claims is allowable, as a whole, based on the entirety of the features recited therein.

AMENDMENT UNDER 37 C.F.R. § 1.111
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Attorney Docket No. Q61990

III. Claim Rejections -- 35 U.S.C. § 102(b)

The Examiner rejects claim 1 under § 102(b) as allegedly being anticipated by Malek.

Thus, the Examiner's position is that Malek discloses or suggests each and every feature of claim

1. Applicant disagrees.

Malek relates to a handover technique for dynamically transferring communication support for a cordless handset to another base station in a TDMA system (Malek: Abstract; and col. 1, lines 19-22). In Malek, when it is determined that a handover operation is to commence, transmissions are made in two timeslots (the original slot and the handover slot) within the same frame (Malek: col. 3, lines 2-10). Likewise, during the same frame, data is received at two separate time slots (*Id.*). Only when it is determined that the data received in the handover timeslot contains no transmission errors is the handover completed by then only transmitting on the handover timeslot and receiving on the handover timeslot (*Id.*). Thus, Malek is fundamentally different from the claimed invention, which does not relate to any such handover technique; and, Malek does not disclose or suggest all of the features of the claimed invention.

For example and not by way of limitation, Malek fails to disclose or suggest "a sequence controller for analyzing a plurality of said sets of assignment control data, producing a plurality of address pointers, storing said plurality of address pointers in said second table in such a sequence that the address pointers can be sequentially read out in a desired transmission sequence, and supplying said command signal to said control data generation unit in response to each of said address pointers", as recited in claim 1.

The Examiner alleges that Malek discloses a sequence controller as a combination of a sequencer 94, address generation unit (AGU) 93 and data RAM 92 (Office Action: page 3; *see also* Malek: Figs. 3 and 4). To the contrary, the sequencer 94 of Malek does not analyze a plurality of sets of assignment control data. Instead, the sequencer 94 issues bit-timed control flow signals to a modem interface unit 95 in order to assemble the slots (for transmission), or disassemble the slots (after reception), within a frame and ensure that the bits within the slots are synchronized with a base station transceiver (Malek: col. 4, lines 61-66). The assembly/disassembly of slots within a frame does not correspond to “a sequence controller for analyzing a plurality of said sets of assignment control data”, as recited in claim 1.

Likewise, the address generation unit 93 and the data RAM 92 fail to disclose or suggest analyzing a plurality of sets of assignment control data. Instead, the address generation unit 93 of Malek selects a next address in the microcode store 128 of the sequencer 94 (Malek: col. 5, lines 5-10). The microcode store 128 contains a series of commands for the sequencer core 124, for example, commands for creating a slot protocol (Malek: col. 5, lines 41-56). The use of the address generation unit 93 of Malek, which can cause the microcode to jump to an appropriate subroutine (Malek: col. 5, lines 7-10), for selecting addresses in the microcode does not correspond to “a sequence controller for analyzing a plurality of said sets of assignment control data”, as recited in claim 1.

Furthermore, in Malek, the data RAM 92 stores protocol bits, address bits and data bits which are called upon during operation of the TDMA controller to build a slot for transmission or to store a received slot (Malek: col. 4, lines 9-12). The data RAM 92 is merely a storage

device and does not perform any analysis. Thus, the data RAM 92 of Malek does not correspond to “a sequence controller for analyzing a plurality of said sets of assignment control data”, as recited in claim 1.

Malek also fails to disclose or suggest “a sequence controller for . . . producing a plurality of address pointers [and] storing said plurality of address pointers in said second table in such a sequence that the address pointers can be sequentially read out in a desired transmission sequence”, as recited in claim 1. Nonetheless, the Examiner alleges that Malek discloses these features as an address generation unit 93 that generates addresses and stores them in data RAM 92, and also selects a next address in the microcode store 128 via the address in RAM 92 read by a slot pointer 182 (Office Action: page 3).

In Malek, the slot pointer 182 provides the addresses in RAM 92 of the data which is to be transmitted in a slot, or the addresses in RAM 92 of the data which has just been received (Malek: col. 6, lines 48-60). As illustrated in Fig. 6 of Malek, transmission of data in slot buffer 188 (as a portion of the RAM 92) is performed by causing a slot pointer 182 to address the data in the slot buffer 188 at a timeslot 1 and later at a timeslot 3 (*see also* Malek: col. 7, lines 24-28). Malek does not disclose or suggest storing a plurality of address pointers in a second table in such a sequence that the address pointers can be sequentially read out in a desired transmission sequence. To the contrary, the slot pointer 182 of Malek does not correspond to the recited plurality of address pointers because the slot pointer 182 of Malek is not “sequentially read out in a desired transmission sequence”. Instead, the slot pointer 182 of Malek can be used at multiple times in a sequence (*e.g.*, at timeslot 1 and later at timeslot 3).

AMENDMENT UNDER 37 C.F.R. § 1.111
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Attorney Docket No. Q61990

For at least the above exemplary reasons, claim 1 is not anticipated by Malek.

IV. Claim Rejections -- 35 U.S.C. § 103(a)

A. Claim 3

Claim 3 stands rejected under § 103(a) as allegedly being unpatentable over Malek.

Claim 3 recites features similar to claim 1. Thus, claim 3 is patentable over Malek based on a rationale analogous to that set forth above for claim 1.

B. Claims 2 and 4

Claims 2 and 4 stand rejected under § 103(a) as allegedly being unpatentable over Malek in view of Kou. Kou does not cure the exemplary deficiencies of Malek, as set forth above for claim 1. Consequently, claims 2 and 4 are patentable over the Examiner's proposed combination of Malek and Kou, at least by virtue of their dependency.

V. New Claims 7-9

Applicant adds new claims 7-9 to obtain an expanded scope of protection. New claim 7 recites that "the assignment terms include one or more of: priority levels classified according to at least one of communication services and urgency, types of packets, and an uplink-to-downlink ratio within a frame" (*see also* new claims 8 and 9). New claims 7-9 are patentable at least by virtue of their dependency.

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U.S. Application No. 09/721,959
Attorney Docket No. Q61990

VI. Formal Matters

A. Priority

The Examiner acknowledges Applicant's claim for foreign priority under 35 U.S.C. § 119, including receipt of the priority document.

B. Cited References

The Examiner provides a signed and initialed copy of the Form PTO/SB/08 submitted with the IDS filed on June 27, 2002, thereby indicating consideration of the references cited therein.

VII. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Application No. 09/721,959
Attorney Docket No. Q61990

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